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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for signaling and waiting to suspend ~~one or more of a plurality of~~first devices, said first devices and second devices associated with a computer, said first devices having a suspend status independent of a suspend status of said second devices, said first devices being connected to a root hub via a communications medium, said method comprising:

determining via a driver of at least one of the first devices when the at least one of the first devices is ready to be suspended;

sending an idle request from the driver of the at least one of the first devices to the root hub when the at least one of the first devices is determined to be ready to be suspended, said sending being independent of any idle requests sent by the second devices;

waiting, by the driver of the at least one of the first devices that sent the idle request, to receive a call from the root hub to a callback function associated with the device; and

executing by the driver the callback function to suspend the at least one of the first devices that sent the idle request while maintaining a state associated with each of the other first devices.

Claim 2 (currently amended): The method of claim 1, ~~further comprising a computer, said computer including the root hub, and~~ wherein the first devices include one or more peripheral components associated with the computer.

Claim 3 (previously presented): The method of claim 2, wherein the peripheral component is selected from a group consisting of a composite device, a root hub, a USB port, and a controller.

Claim 4 (canceled).

Claim 5 (currently amended): The method of claim 1, wherein the first devices each have an active state and an idle state and wherein the first devices are each ready to be suspended when in the idle state.

Claim 6 (currently amended): The method of claim 1, wherein the first devices comprise a plurality of nodes organized in a tree structure, and wherein the first devices comprise child nodes of the root hub.

Claim 7 (original): One or more computer readable media having computer-executable instructions for performing the method recited in claim 6.

Claim 8 (original): The method of claim 6, wherein the nodes in the tree are connected via a Universal Serial Bus.

Claim 9 (currently amended): The method of claim 6, wherein the at least one of the first devices has one or more child nodes in the tree structure and wherein the at least one of the first

devices is ready to be suspended only when all of the one or more child nodes thereof is ready to be suspended.

Claim 10 (currently amended): The method of claim 9, further comprising receiving, by the at least one of the first devices, an idle request from at least one of the child nodes thereof.

Claim 11 (currently amended): The method of claim 10, further comprising propagating the idle request from the at least one of the first devices to a controller at a root of the tree structure.

Claim 12 (currently amended): The method of claim 11, wherein propagating the idle request comprises propagating the idle request by inductively traversing the tree structure from the at least one of the first devices to the controller.

Claim 13 (currently amended): The method of claim 11, wherein propagating the idle request comprises transmitting the received idle request from the at least one of the first devices to another one of the ~~the second~~ first devices if the at least one of the first devices is ready to be suspended and has received an idle request from all of the child nodes thereof.

Claim 14 (currently amended): The method of claim 11, wherein propagating the idle request comprises:

determining whether the at least one of the first devices has received an idle request from each of the child nodes thereof;

waiting to receive an idle request from each of the child nodes if an idle request from each of the child nodes has not been received; and

submitting an idle request to the root hub if the at least one of the first devices has received an idle request from all of the child nodes.

Claim 15 (currently amended): The method of claim 1, wherein sending an idle request comprises transmitting an input/output control (IOCTL) request from the at least one of the first devices to the root hub.

Claim 16 (currently amended): The method of claim 15, wherein transmitting the IOCTL request comprises transmitting an input/output request packet from the at least one of the first devices to the root hub.

Claim 17 (currently amended): The method of claim 1, further comprising receiving, by the at least one of the first devices, the call from the root hub to the callback function associated therewith and suspending the at least one of the first devices in response to execution of the received callback function.

Claim 18 (currently amended): The method of 17, further comprising waking the at least one of the first devices.

Claim 19 (currently amended): The method of 18, wherein waking occurs in response to the at least one of the devices signaling the root hub that the at least one of the first devices is ready to be awakened.

Claim 20 (currently amended): The method of claim 18, wherein waking occurs in response to the root hub signaling the at least one of the first devices to wake.

Claim 21 (currently amended): The method of claim 18, wherein the at least one of the first devices comprises one of a plurality of nodes organized in a tree structure, wherein the at least one of the first devices has one or more child nodes, and wherein waking occurs in response to at least one of the child nodes signaling the at least one of the first devices to wake.

Claim 22 (original): The method of claim 18, wherein waking comprises resetting the sent idle requests.

Claim 23 (currently amended): The method of claim 1, further comprising sending a cancel request from the at least one of the first devices to the root hub when the at least one of the first devices is no longer ready to be suspended, said sending a cancel request occurring after sending the idle request.

Claim 24 (currently amended): The method of claim 1, further comprising another device sending an idle request to the root hub when the other device is ready to be suspended and

suspending simultaneously with the at least one of the first devices, said other device having input/output control and function independent from the at least one of the first devices.

Claim 25 (currently amended): A method for suspending a tree of devices, said tree comprising one or more devices hierarchically organized as parent devices and child devices, said tree further comprising a universal serial bus (USB) hub controller at a root of the tree, said method comprising:

receiving, by the USB hub controller, an idle request from one of the devices in the tree when the device is ready to be suspended; and

suspending, by the USB hub controller in response to the received idle request, the device and any child devices thereof only when an idle request has been received from the device and all of the child devices thereof such that the device and all child devices thereof are suspended while a state associated with each of the other devices in the tree is maintained, whereby idle request from each of the child devices propagates through the tree from the parent device to the USB hub controller.

Claim 26 (previously presented): The method of claim 25, wherein receiving an idle request comprises receiving, by the USB hub controller, an idle request from one or more of the child devices via software for controlling the child devices.

Claim 27 (previously presented): The method of claim 25, wherein suspending comprises executing a callback function for all of the child devices to put all of the child devices into a low power mode.

Claim 28 (previously presented): The method of claim 25, wherein the parent devices and the child devices are connected via USB, wherein one of the parent devices comprises a USB hub and wherein one of the child devices connects to a port of the USB hub, and further comprising selectively suspending, by the USB hub controller, the USB hub.

Claim 29 (previously presented): The method of claim 25, further comprising a computer, said computer including the USB hub controller, wherein the parent devices and the child devices are connected via USB, and further comprising suspending, by the computer, a USB host controller.

Claim 30 (previously presented): The method of claim 25, wherein receiving an idle request comprises receiving, by the USB hub controller, an input/output control (IOCTL) request from one or more of the child devices.

Claim 31 (previously presented): The method of claim 30, wherein receiving the IOCTL request comprises receiving, by the USB hub controller, an input/output request packet from the one or more child devices.

Claim 32 (canceled).

Claim 33 (original): One or more computer readable media having computer-executable instructions for performing the method recited in claim 25.

Claim 34 (previously presented): One or more computer-readable media having computer-executable components for signaling and waiting to suspend a device in a tree of devices, said

tree comprising one or more devices hierarchically organized as parent devices and child devices, said tree having a root hub controller at a root of the tree, said components comprising:

a signaling component for sending an idle request from at least one child device to a parent device when the child device is ready to be suspended, wherein the idle request propagates through the tree from the parent device to the root hub controller; and

a driver component for waiting to receive, by the child device, a call from the root hub controller to a callback function associated with the child device to suspend the child device in response to execution of said callback function by the child device while a state associated with each of the other child devices is maintained.

Claim 35 (previously presented): The method of claim 34, wherein the signaling component receives an idle request from at least one child of the child devices, and wherein the signaling component sends the received idle request to the parent device.

Claim 36 (previously presented): The computer-readable media of claim 34, wherein the signaling component receives a call to a callback function from the root hub controller in response to the propagated idle request.

Claim 37 (previously presented): The computer-readable media of claim 36, wherein the driver component suspends the child device in response to execution of the callback function.

Claim 38 (original): The computer-readable media of claim 37, wherein the driver component wakes the child device in response to activity by the child device or a signal from the parent device or both.

Claim 39 (original): The computer-readable media of claim 34, wherein the callback function comprises a power down function for powering down the child device.

Claim 40 (original): The computer-readable media of claim 39, wherein the power down function comprises a low power function for putting the child device into a low power mode.

Claim 41 (original): The computer-readable media of claim 34, wherein the parent devices and child devices are connected via a Universal Serial Bus.

Claim 42 (original): The computer-readable media of claim 34, wherein the signaling component sends a cancel request from the child device to the parent device in response to non-idle activity by the child device.

Claim 43 (currently amended): One or more computer-readable media having computer-executable components for asserting power control over a tree of devices by a root hub controller at a root of the tree, said tree comprising one or more devices hierarchically organized as parent devices and child devices in the tree, said tree and additional devices being associated with a computer, said components comprising:

an interface component for receiving, by the root hub controller, an idle request from one of the devices in the tree when the device is ready to be suspended; and

a controller component for suspending, by the root hub controller in response to the received idle request, the parent device and any child devices thereof while maintaining a state associated with each of the other devices in the tree, said suspending occurring only when an idle request has been received from the parent device and all of the child devices thereof such that the parent device and all child devices thereof are suspended independently of the other devices in the tree and independently of the additional devices, whereby the controller component does not suspend the additional devices and does not receive idle requests from the additional devices.

Claim 44 (previously presented): The computer-readable media of claim 43, wherein the root hub controller wakes the devices in the tree in response to activity by the root hub controller or any of the devices or both.

Claim 45 (original): The computer-readable media of claim 43, wherein the child device comprises a Human Interface Device (HID).

Claim 46 (original): The computer-readable media of claim 43, wherein the child device comprises a device embedded in a computer.

Claim 47 (previously presented): The computer-readable media of claim 43, wherein the parent devices and child devices are connected via a Universal Serial Bus.

Claim 48 (currently amended): A computer-readable medium having stored thereon a data structure representing an idle request, said data structure comprising:

a first field storing a routine attribute representing a callback function; and

a second field storing a context attribute representing a callback context, wherein a device having child nodes transmits an idle request to a root hub via said data structure when the device is ready to suspend, said callback function executing to suspend the device in response to the device transmitting the idle request, said callback context providing an environment for executing said callback function, wherein the first device connected to the root hub and second device not connected to the root hub are associated with a computer, said transmitting is independent of any idle requests by the second device, and wherein only the device and all its child nodes suspends while a state associated with another device connected to the root hub is maintained.

Claim 49 (currently amended): The computer-readable medium of claim 48, wherein the first device has one or more child nodes organized in a tree structure, wherein the first device has an active state and an idle state, and wherein the first device is ready to suspend when each of the one or more child nodes of the first device is ready to suspend.

Claim 50 (currently amended): The computer-readable medium of claim 48, wherein the first device and the root hub are connected via a Universal Serial Bus.

Claim 51 (previously presented): The method of claim 25, wherein the state associated with each of the other first devices in the tree comprises an active state, an idle state, or a suspended state.